Media Copyright Prorection
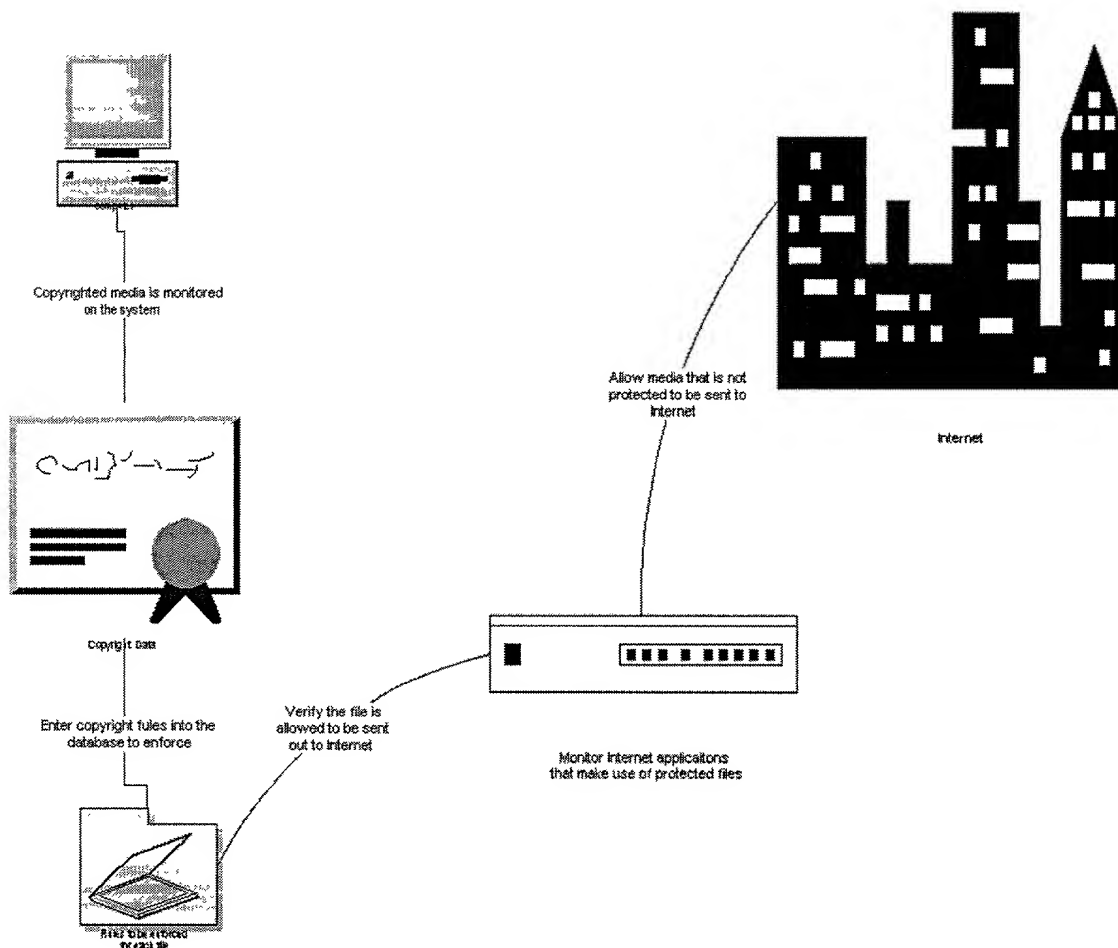

Copyrighted media is monitored
on the system

Copyright Data

Enter copyright rules into the
database to enforce

Verify the file is
allowed to be sent
out to Internet

Allow media that is not
protected to be sent to
Internet

Internet

Monitor Internet applicaitons
that make use of protected files

Figure 1: Overview of The System

Figure 1
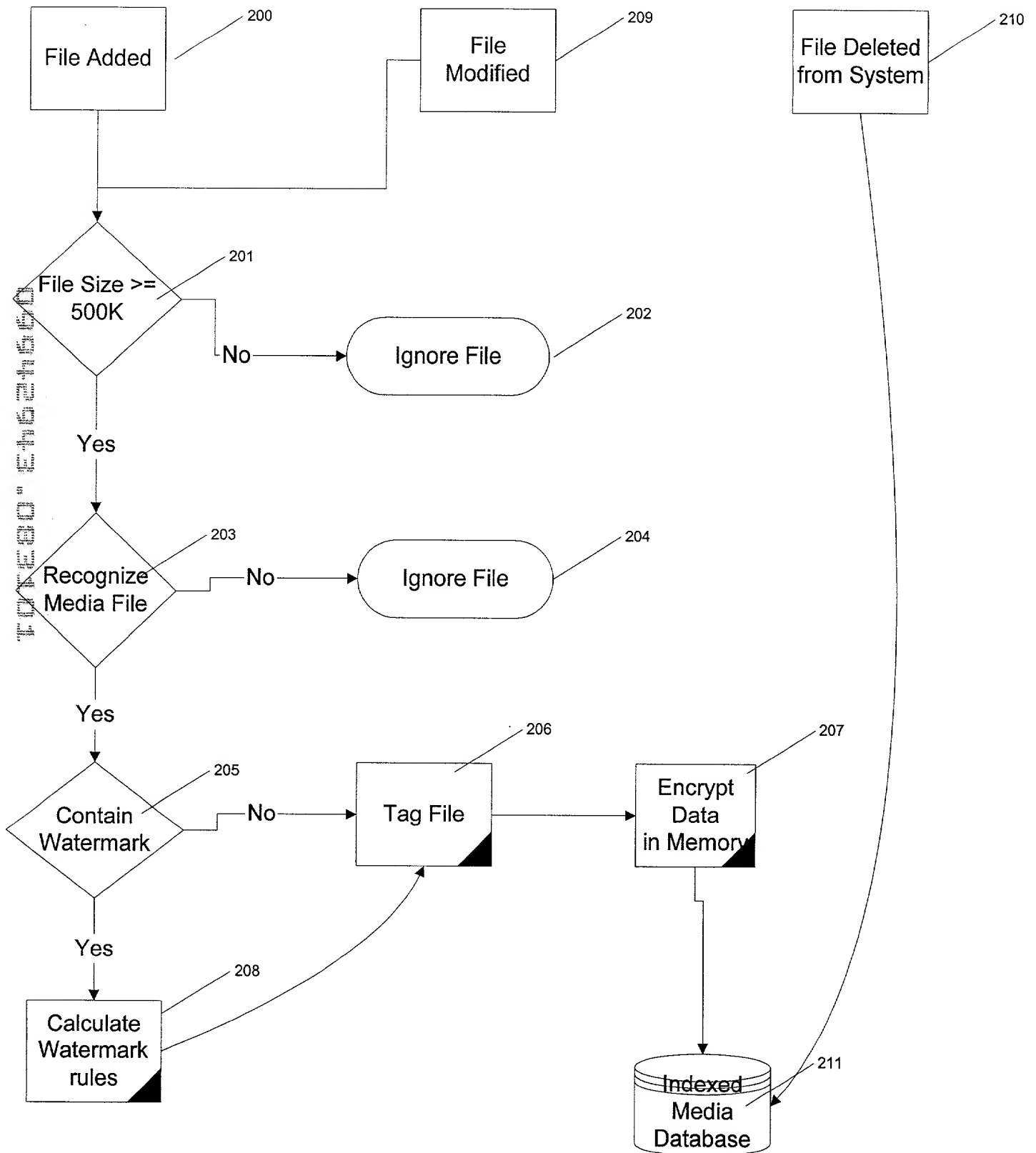File System detected a new filesystem event

File Added — 200

File Modified — 209

File Deleted from System — 210

File Size >= 500K — 201

No → Ignore File — 202

Yes

Recognize Media File — 203

No → Ignore File — 204

Yes

Contain Watermark — 205

No → Tag File — 206 → Encrypt Data in Memory — 207

Yes

Calculate Watermark rules — 208

Indexed Media Database — 211

FIGURE 2

Figure 2
New Socket opened — 300

Yes

Is process already being tracked ? — 301

No → Add application and port to list to be tracked — 302

Yes

Add port to list for that application — 303

Process tries to access a file in our database — 304

Is process in list to watch — 305

No → Ignore — 306

Yes

Rules allow data to go out — 307

No → Block the read of the file — 308

Yes

Ignore — 309

FIGURE 3

Router

Firewall

Napster/GNutella
Traffic for example

Switch

Load Balancing Hardware

Non-Napster/
GNutella
Traffic

Present Invention

LAN User

Napster/
GNutella
User for Example
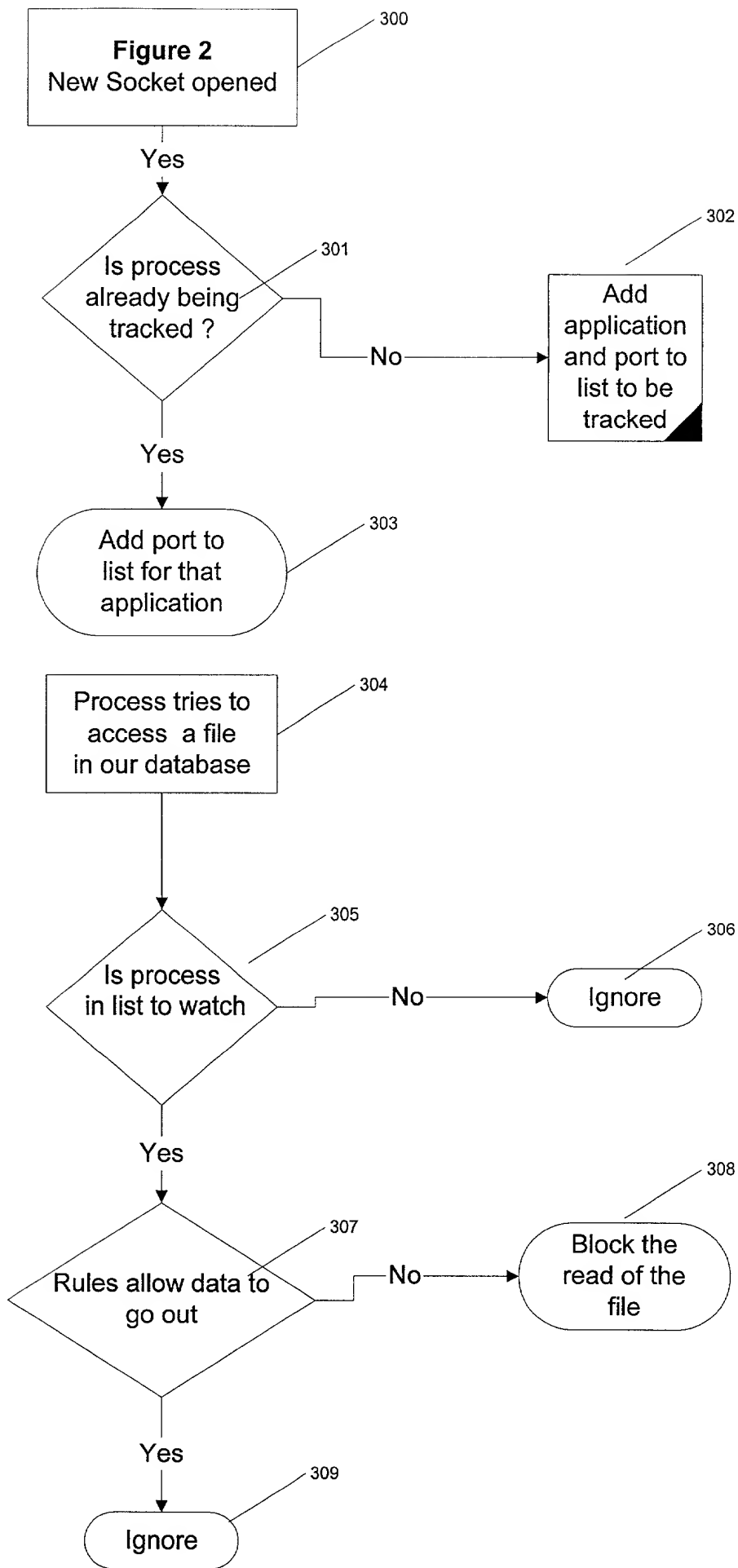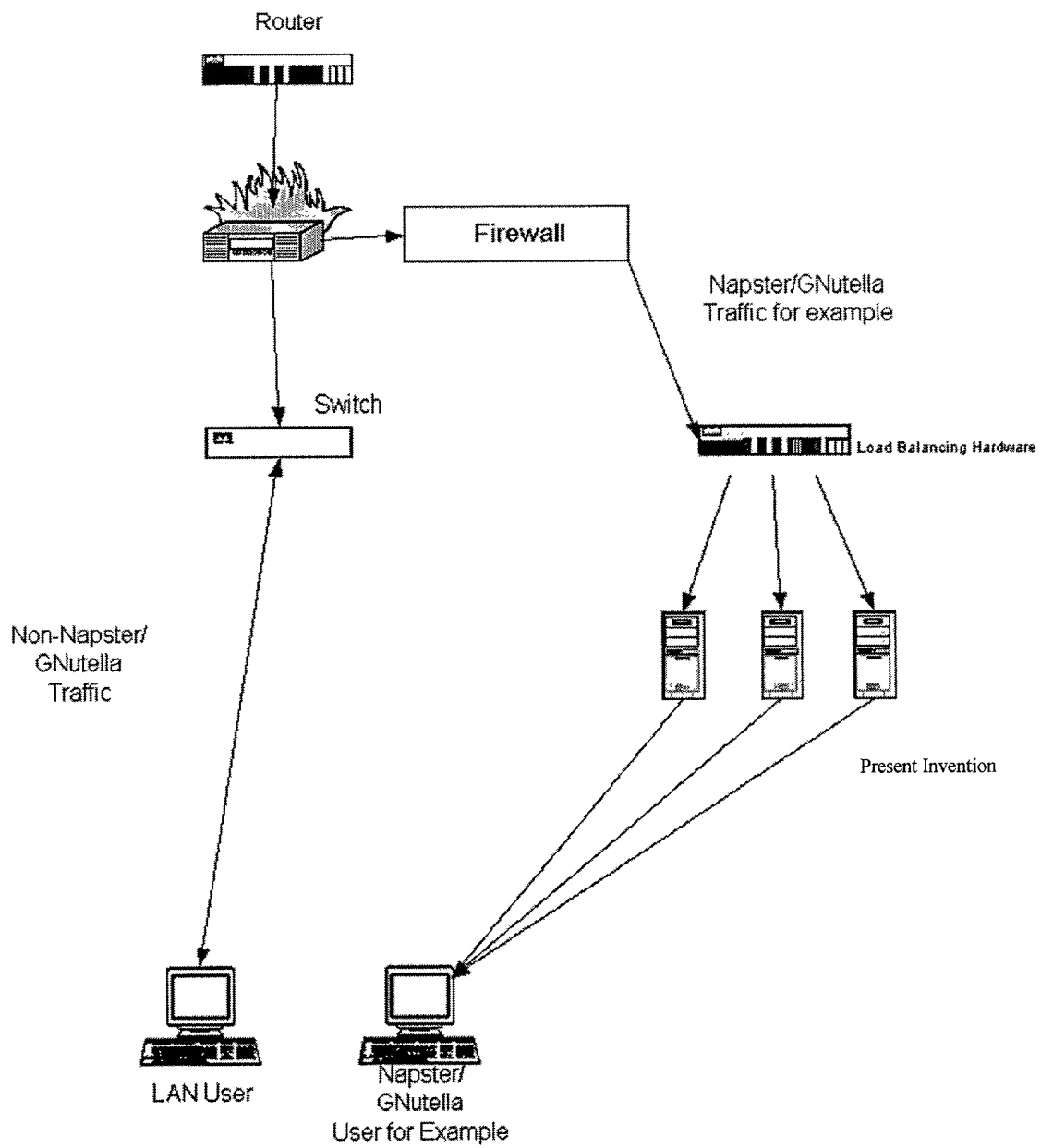
Figure 4

InfoGuard Software Flow Chart

Incoming IP connection — 500

Is this a new connection — 501

Yes → Create a buffer for this new IP connection — 502

No

Is there data in this packet we want to examine — 503

Yes

Add copy of data to buffer for the existing connection — 504

Pass data onto the destination machine — 505

Is buffer size enough to tag data — 506

Yes

Tag Data and send to InfoMart — 507

InfoMart Tags — 510

Is tag found in InfoMart — 508

Yes

Take action based on rules found with associated tag — 509

Data from buffer is stored in terabyte database for later reconstruction if needed — 511

InfoGuard Logging — 512

FIGURE 5